

Introduction to Data Collection and Analysis

Steps II, III and IV of the Vermont Seven Step Workforce Planning Model (posted on the “Getting Started” page at http://humanresources.vermont.gov/training/workforce_planning/getting_started) address the data collection and data analysis phases of workforce planning. Data collection begins with taking a 360 degree look at your organization’s recent and current workforce environment.

Recommendation #1: Review the document, “[Projecting the Workforce Supply](#)” posted on this page.

This provides work pages that will assist the workforce planning team in:

- a) Assembling the necessary workforce data and information; and
- b) Analyzing that information in order to identify the organization’s future workforce needs.

Step II: Perform Environmental Scans and Assessments Using Workforce and Other Data

Environmental scans and assessments are a look at past and current patterns and performance. (Future projections are based in part on an analysis of the past and current patterns.) First determine what time period will provide you with a solid base for the forward projections you wish to make in Step III. Usually, this will be the most recent three to five years.

A. Conduct a workforce environmental scan

Recommendation #2: Read the article: “[Conducting an Environmental Scan for Workforce Planning](#)” posted on this page, and use it as a guide to conducting a scan of the internal and external workforce environments in which your organization operates.

Recommendation #3: In addition to the two sources identified above, primary tools provided in this Toolkit for collecting and organizing data are:

- “[Workforce Planning Environmental Scan Sources](#)”. This document identifies sources from which you can collection information about:
 - The external environment that influences your organization’s workforce (educational and population trends, regulatory bodies, socio-economic factors, science and technology, etc.); and
 - Your organization’s internal environment (directs you to sources within your organization).
- “[Workforce Planning Data Collection Worksheets](#)”. This is a series of Excel spreadsheets with a basic structure for the organization’s internal data – its workforce statistics. You will be able to download this document and adapt it to your organization’s needs. It may call for more data than you will need, or than you have access to. If you have questions, contact workforceplanning@state.vt.us.
- The responses obtained from the “[Workforce Planning Questions for Managers](#)”.

B. Conduct a workforce SWOT or SCOT analysis (Strengths, Weaknesses or Challenges, Opportunities, and Threats)

The Toolkit also provides tools for conducting an SWOT Analysis. Many people are familiar with this tool as a part of strategic planning, in which the organization examines its entire environment. It is also useful when used on the more specific assessment of workforce needs. The workforce planning SWOT analysis is introduced in the “[Conducting an Environmental Scan for Workforce Planning](#)” article mentioned above. Other documents on this page will help to complete the SWOT analysis:

1. “[Workforce Planning SWOT Instructions](#)”
2. “[Workforce Planning SWOT Template](#)”

C. Conduct a workforce supply/demand analysis using the strategic plan and the results of the environmental scan and SWOT analysis.

1. Identify the current “Knowledge, Skills and Abilities” (KSAs – also known as “competencies”) base available; and
2. Identify the current job classes.

To elaborate on an approach to analyzing the workforce supply and demand:

1. Begin with the strategic plan. If your organization does not have a strategic plan, be sure there are several broad goals in place, with strategies for reaching them.
2. Compare your current workforce supply and circumstances to the goals and strategies articulated in the strategic plan, and to the results of the SWOT analysis. Include what you know about the knowledge, skills and abilities your current staff possess, and the current job classes.
3. *What observations can you make about the readiness of your current workforce to meet the work demands your organization will face in the near future?*

Recommendation #4: At this point you may wish also to refer to the [Competencies section](#) of the Workforce Planning Toolkit.

Step III: Project the Workforce Supply Needed to Accomplish Your Strategic Plan

The Competencies section of the Workforce Planning Toolkit is the primary resource for this step in the process.

1. Review the article, “[Creating Competencies](#)”.
2. Review the “Work Functions Work Page” and the “Workforce Supply Work Page”.
3. Move through each activity under Step III:
 - a. Identify work functions that must be performed in order to accomplish the strategic plan.
 - b. Identify the staffing levels needed to accomplish those work functions identified above.

- c. Identify the KSAs/competencies required to accomplish those work functions identified above.
- d. Identify the KSAs/competencies needed in each job class (category of staff).
- e. Project the attrition rate likely given current attrition and such external influences as the economy, local and national competition for job applicants who have the competencies you need, etc.
- f. Consider whether or not you will be able to replace staff lost through attrition (e.g. political and economic influences).

Step IV: Analyze Workforce Gaps

The next section of the Workforce Planning Toolkit will address analyzing the gaps between the workforce available and the workforce needed, and addressing those gaps. Begin that process now by using the “[Competency Gap Assessment](#)” form on the Competencies page of this website.